

WORKMAN NYDEGGER

A PROFESSIONAL CORPORATION
ATTORNEYS AND COUNSELORS
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111
(801) 533-9800
FAX (801) 328-1707

FACSIMILE COVER PAGE

TO: EXAMINER ANU RAMANA

FAX: (703) 746-9107

NO. OF PAGES: 6 (incl. this page)

FROM: John M. Guynn

SUBJECT: 09/977,154

DATE: MARCH 15, 2004

OUR FILE NO: 14000.11

12

PRIVILEGED AND CONFIDENTIAL

SEE FOLLOWING.

THE INFORMATION CONTAINED IN THIS FACSIMILE MESSAGE IS ATTORNEY PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE, AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL (801) 533-9800
AS SOON AS POSSIBLE

1. (Proposed) An interference screw for use in securing a tissue graft to a bone, comprising:

a threaded body extending between a proximal end and a distal end along a central axis and being sized and configured for threadable insertion into a bone tunnel, the threaded body further comprising:

a proximal threaded section comprising a proximal thread having an average diameter; and

~~an angled face with end~~ *the proximal end* having an angle relative to the central axis in a range of about 10° to about 80°; and

a distal threaded section, disposed between the proximal threaded section and the distal end, comprising a distal thread having a constant diameter that is less than the average diameter of the proximal threaded section,

the proximal and distal threads having the same pitch.

17. (Proposed) An interference screw for use in securing a tissue graft to a bone, comprising:

a threaded body extending between a proximal end and a distal end along a central axis and being sized and configured for threadable insertion into a bone tunnel, the threaded body further comprising:

a proximal threaded section sized and configured so as to lie adjacent to cortical bone when the interference screw is completely inserted into a bone tunnel, the proximal threaded section having an average diameter;

a distal threaded section sized and configured so as to lie adjacent to cancellous bone when the interference screw is completely inserted into a bone tunnel, the distal threaded section having a constant diameter that is less than the average diameter of the proximal threaded section;

a single continuous thread of uniform pitch extending between the proximal and distal ends; and

a tapered section disposed between the distal threaded section and the distal end that facilitates insertion of the distal end of the interference screw into a bone tunnel, wherein the tapered section is ~~optionally~~ threaded.

21. (Proposed) An interference screw for use in securing a tissue graft to a bone, comprising:

a threaded body extending between a proximal end and a distal end along a central axis and being sized and configured for threadable insertion into a bone tunnel, the threaded body further comprising:

a proximal threaded section sized and configured so as to lie adjacent to cortical bone when the interference screw is completely inserted into a bone tunnel, the proximal threaded section having an average diameter that is constant throughout at least a portion of the proximal threaded section;

a distal threaded section sized and configured so as to lie adjacent to cancellous bone when the interference screw is completely inserted into a bone tunnel, the distal threaded section having a constant diameter that is less than the diameter of the proximal threaded section; and

a single continuous thread of uniform pitch extending between the proximal and distal ends; and

a recess, extending through the threaded body from the proximal end at least partially toward the distal end, that is sized and configured to receive at least a portion of a drive shaft of a driver.

24. (Proposed) An interference screw for use in securing a tissue graft to a bone, comprising:

a threaded body extending between a proximal end and a distal end along a central axis and being sized and configured for threadable insertion into a bone tunnel, the threaded body further comprising:

a proximal threaded section sized and configured so as to lie adjacent to cortical bone when the interference screw is completely inserted into a bone tunnel, the proximal threaded section comprising a proximal thread having an average diameter;

a distal threaded section sized and configured so as to lie adjacent to cancellous bone when the interference screw is completely inserted into a bone tunnel, the distal threaded section comprising a distal thread having a constant diameter that is less than the average diameter of the proximal threaded section,

the proximal and distal threads having the same pitch;

a threaded and tapered transition section disposed between the distal and proximal threaded sections and having increasing diameter from the distal threaded section to the proximal threaded section; and

a tapered end disposed between the distal threaded section and the distal end that facilitates insertion of the distal end of the interference screw into a bone tunnel.

25. (Proposed) A method of securing a soft tissue graft to a bone, comprising:

forming a bone tunnel of constant diameter through a bone so that the bone tunnel is surrounded by a cortical bone region and a cancellous bone region;

inserting a soft tissue graft at least partially through the bone tunnel; and

threadably inserting a single interference screw having a length in a range of about 35 mm to about 40 mm and comprising portions of varying diameter and constant thread depth into the bone tunnel in order for the interference screw to apply a greater compressive force against the soft tissue graft in the cortical bone region of the bone tunnel and a lesser compressive against the soft tissue graft in the cancellous bone region.

11/1

12.